

Claims

1. An apparatus for separating a fine particulate material from other matter comprising:
 - a frame having a front end and a back end;
 - an adjustable screen having a front end, a back end, a top surface and a bottom surface, wherein the adjustable screen is positioned over a top of the frame and the back end of the adjustable screen is connected to the back end of the frame;
 - a removable trough positioned near the back ends of the frame and adjustable screen; and
 - a motor attached to the bottom surface of the adjustable screen.
2. The apparatus of claim 1 further comprising a tow bar having an upper surface and a lower surface attached to the front end of the frame.
3. The apparatus of claim 2 further comprising a support bar attached to the lower surface of the tow bar.
4. The apparatus of claim 3 further comprising a vertical bar member of adjustable height attached to the upper surface of the tow bar and the bottom surface of the adjustable screen member.
5. The apparatus of claim 4 further comprising a crank handle attached to the vertical bar member for adjusting the height of the vertical bar member.
6. The apparatus of claim 1 further comprising at least one wheel attached to the frame for facilitating movement of the apparatus.
7. The apparatus of claim 1 wherein the adjustable screen includes a lip member positioned about a circumference of the upper surface of the adjustable screen except the back end of the adjustable screen.

8. The apparatus of claim 1 further comprising a platform attached to the back end of the frame for supporting the removable trough.
9. The apparatus of claim 1 wherein the adjustable screen further comprises a plurality of vertical support bars positioned proximate to the bottom surface of the adjustable screen and extending from the front end to the back end of the adjustable screen.
10. The apparatus of claim 1 wherein the removable trough includes a lip member extending from an upper edge of the removable trough for directing material into the trough.
11. The apparatus of claim 1 wherein the removable trough includes a pair of handles positioned at opposite ends of the trough.
12. The apparatus of claim 1 further comprising at least one horizontal cross bar member positioned proximate the bottom surface of the adjustable screen and extending across a width of the adjustable screen.
13. The apparatus of claim 12 further comprising a pair of mounting brackets for mounting said at least one horizontal cross bar member wherein the mounting brackets comprise an opening contained therein for retaining said at least one horizontal cross bar member.
14. The apparatus of claim 13 wherein the mounting brackets further comprise an outer layer, a middle layer, and an inner layer which lies adjacent said opening.
15. The apparatus of claim 14 wherein said middle layer comprises an isolation material.
16. The apparatus of claim 12 wherein said motor is attached to said at least one horizontal cross bar member.

17. The apparatus of claim 16 further comprising a mounting plate for mounting the motor to said at least one horizontal cross bar member.
18. An apparatus for separating sand from debris in a golf course sand trap comprising:
 - a frame having a first end and a second end;
 - a screen having a first end and a second end positioned over the frame wherein the first end of the screen is adjustable in height and the second end of the screen is connected to the second end of the frame;
 - a removable trough positioned near the second ends of the frame and screen; and
 - a motor attached near a bottom surface of the screen.
19. The apparatus of claim 18 further comprising a vertical bar member of adjustable height connected to the first end of the screen member for adjusting the height of the first end of the screen member.
20. The apparatus of claim 18 further comprising at least one wheel attached to the frame for facilitating movement of the apparatus.
21. The apparatus of claim 18 further comprising a lip member positioned about a circumference of an upper surface of the screen except the second end of the screen.
22. The apparatus of claim 18 further comprising a platform attached to the second end of the frame for supporting the removable trough.
23. The apparatus of claim 18 wherein the screen further comprises a plurality of vertical support bars positioned proximate to a bottom surface of the screen and extending from the first end to the second end of the screen.
24. The apparatus of claim 18 wherein the removable trough includes a lip member extending from an upper edge of the removable trough for directing debris into the removable trough.

25. The apparatus of claim 18 wherein the removable trough includes a pair of handles positioned at opposite ends of the removable trough.
26. The apparatus of claim 18 further comprising at least one horizontal cross bar member positioned proximate a bottom surface of the screen and extending across a width of the screen.
27. The apparatus of claim 26 further comprising a pair of mounting brackets for mounting said at least one horizontal cross bar member wherein the mounting brackets comprise an opening contained therein for retaining said at least one horizontal cross bar member.
28. The apparatus of claim 27 wherein the mounting brackets further comprise an outer layer, a middle layer, and an inner layer which lies adjacent said opening.
29. The apparatus of claim 28 wherein said middle layer comprises an isolation material.
30. The apparatus of claim 26 wherein the motor is attached to said at least one horizontal cross bar member.
31. The apparatus of claim 30 further comprising a mounting plate for mounting the motor to said at least one horizontal cross bar member.
32. A method for separating fine particulate matter from other matter comprising the steps of:
 - providing a frame and a screen positioned over a top of the frame wherein the frame and screen are movably connected to one another at one of their ends and the screen is adjustable in height relative to the frame at their opposite ends;
 - raising the height of the screen relative to the frame at its adjustable end;
 - pouring material to be separated onto the screen;
 - vibrating the screen to assist in passing material through the screen; and

collecting material that does not pass through the screen in a removable trough connected to the frame.